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In Claim 5, line 1, please delete "any of claims 1-2" and substitute - Claim 1 - therefor.

In Claim 6, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 6, line 1, please delete "any of claims 1-5" and substitute - Claim 1 - therefor.

In Claim 7, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 8, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 9, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 10, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 10, line 1, please delete "any of claims 6-9" and substitute - Claim 6 - therefor.

In Claim 11, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 11, line 1, please delete "any of claims 1-10" and substitute - Claim 1 - therefor.

In Claim 12, line 1, please insert - The - at the beginning of the claim and please delete "Composite" and substitute - composite - therefor.

In Claim 12, line 1, please delete "any of claims 1-11" and substitute - Claim 1 - therefor.

In Claim 13, line 1, please delete "any of claims 1-11" and substitute - Claim 1 - therefor.

Please add the following new Claims as follows:

A2 14. The use according to Claim 13, characterized in that the use is for chemical synthesis of a polymer on the composite material, such as of an oligonucleotide or an oligopeptide.

15. The use according to Claim 13, characterized in that the use is for enzymatic/ catalytic reactions which are performed in a bio-reactor with the enzyme or catalyst bound to the composite material.

16. The use according to Claim 13, characterized in that the use is for culturing of cells wherein the cells are cultured on the composite material.

17. A method for the chemical synthesis of a polymer such as an oligonucleotide or an oligopeptide on a solid phase, characterized in that the solid phase is the composite material which is defined in Claim 1.

18. A method for performing enzymatic/catalytic reactions in a bio-reactor, characterized in that the enzyme and/or catalyst used is bound to a composite material which is defined in Claim 1.

19. A method for culturing cells, characterized in that the cells are cultured on the composite material which is defined in Claim 1.

20. A separation method comprising that a solution containing substances that are to be separated are passed through a bed containing a separation material, said method being based on affinity between a substance to be separated and a ligand bound to the separation material or on differences in shape or in molecular weights of the substances to be separated, characterized in that said material is a composite material comprising two or more components of which one is super-porous polysaccharide (main component) which outside the superpores contains a gel phase with micro-pores and the other component(s) (secondary component(s)) are different from the main component.

21. The separation method of Claim 20, characterized in that the main component is in the form of discrete particles or of a continuous structure.

22. The separation method of Claim 20, characterized in that at least one of the secondary components is within the super-pores of the main component.

23. The separation method of Claim 20, characterized in that at least one of the secondary components is present in both the super-pores and in the gel phase of the main component.

24. The method of Claim 20, characterized in that the affinity ligand is selected amongst ion exchange groups, amphoteric groups, chelating groups, bio-affine groups, groups which can be used in covalent chromatography, groups which gives π - π interaction, groups which can be used during hydrophobic interaction chromatography, groups which give thiophilic interactions, or affinity binding inorganic materials which can be present as a secondary component, such as hydroxyapatite.

25. The separation method of Claim 20, characterized in that said composite material is in the form of particles.

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26. The separation method of Claim 25, characterized in that said particles are in the form of a packed bed or a fluidized bed.

27. The separation method of Claim 20, characterized in that said composite material is in the form of a monolith.

28. The separation method of Claim 20, characterized in that the composite material carries an affinity ligand and that the substance after the solution has passed through the bed is desorbed from the composite material by the use of a solution containing a desorbing agent.

29. The separation method of Claim 28, characterized in that the desorbing agent gives an increased ionic strength, a change in pH or competes with the bonding between the substance and the affinity ligand.

30. The separation method of Claim 20, characterized in that the combination of electroelution of a bound substance from the composite material with a composite material comprising a monolithic electrically conducting secondary component is excluded.

REMARKS

Claims 1-13 were pending in the captioned application. Applicants have amended claims 3, 4, 5, 6, 10, 11, 12, and 13 to more fully conform with U.S. practice and to delete multiple dependencies. Applicants have added new Claims 14-30.

Applicants respectfully assert that all amendments are fairly based on the specification, and respectfully request their entry.

Applicants believe that the claims, as amended, are an allowable form, and earnestly solicit the allowance of Claims 1-30.

Respectfully submitted,



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